



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
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November 27, 2002

Mr. Mark Griffin
Nishikawa Standard Company
324 Morrow Street
Topeka, IN 46571

Re: **087-16188**
Third Minor Source Modification to:
Part 70 Operating Permit No.: **T 087-7182-00031**

Dear Mr. Griffin:

Nishikawa Standard Company was issued Part 70 Operating Permit T 087-7182-00031 on April 12, 2001, for stationary extruded rubber seals manufacturing source. An application to modify the source was received on October 2, 2002. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (a) One (1) SDM EE extrusion line, identified as emission unit X-035, with a capacity of 1,289 pounds of rubber per hour, including:
 - (1) Two (2) natural gas-fired microwave curing ovens, exhausting to vents PEV-E3 and PEV-E4, capacity: 0.143 million British thermal unit per hour, each.
 - (2) Two (2) natural gas-fired hot air rubber curing ovens, exhausting to stacks PEF-E7 and PEF-E8, capacity: 0.850 million British thermal unit per hour, each.
 - (3) One (1) wire metal system, consisting of two (2) natural gas-fired burners, exhausting to stack PEF-E9, capacity: 0.375 million British thermal unit per hour, each.
- (b) One (1) spray line, identified as X-036, equipped with six (6) high volume, low pressure (HVL) spray guns, using dry filters as controls and exhausting to Stack PEF-E10, with two (2) 0.340 million British thermal unit per hour natural gas-fired coating cure ovens, capacity: 10 grams per minute of coating per gun.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The source may begin construction and operation when the minor source modification has been issued. Operating conditions shall be incorporated into the Part 70 Operating Permit as a significant permit modification (086-16667-00031) in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter contact CarrieAnn Paukowits, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395, ext. 18, or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,
Original signed by

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments (Changed permit pages, TSD)
CAP/MES

cc: File - LaGrange County
LaGrange County Health Department
Northern Regional Office
Air Compliance Section Inspector - Doyle Houser
Compliance Branch - Karen Nowak
Administrative and Development - Lisa Lawrence
Technical Support and Modeling - Michele Boner



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PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Nishikawa Standard Company
324 Morrow Street
Topeka, Indiana 46571**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 087-7182-00031	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: April 12, 2001 Expiration Date: April 12, 2006

First Minor Source Modification No.: 087-11820-00031, issued on March 15, 2000
First Significant Source Modification No.: 087-12244-00031, issued on July 19, 2000
Second Minor Source Modification No.: 087-14331-00031, issued on July 24, 2001
First Minor Permit Modification No.: 087-14376-00031, issued on July 20, 2001
First Administrative Amendment No.: 087-15216-00031, issued on January 24, 2002

Third Minor Source Modification: 087-16188-00031	Affected Pages: 9, 31, 32, 32a, 33, 34, 37, 38 and 48; Pages 41a, 41b and 41c are removed; and 9a is added
Issued by: Original signed by Paul Dubenetzky, Chief Permit Branch Office of Air Quality	Issuance Date: November 27, 2002

hour and 4.8 pounds of talc per hour.

- (dd) One (1) mixing department, identified as X018, constructed in 1987, equipped with one (1) carbon black weigh station, two (2) mixing mills, and one (1) Barwell pelletizer line, all exhausting to a small baghouse identified as CE-02 and exhausting at stack PEF-A10, capacity: 416.7 pounds of rubber per hour, 3.2 pounds of talc per hour, and 83.3 pounds of carbon black per hour.
- (ee) One (1) SDM ED extrusion line, identified as emission unit X-033, with a maximum capacity of 1,289 pounds of rubber per hour, equipped with two (2) natural gas-fired microwave curing ovens, each has a heat input capacity of 0.143 million British Thermal Units per hour (mmBtu/hr), exhausting to vents PEV-E1 and PEV-E2; two (2) natural gas-fired hot air rubber curing ovens, each has a heat input capacity of 0.850 mmBtu/hr exhausting to stacks PEF-E1 and PEF-E2; and one wire metal system consisting of two (2) natural gas-fired burners, each has a heat input capacity of 0.375 mmBtu/hr and exhausting to stack PEF-E6.
- (ff) One (1) spray line identified as X-034, equipped with six (6) High Volume Low Pressure (HVLP) spray guns, using dry filters to control PM overspray emissions, exhausting to stack PEF-E3, and two (2) natural gas-fired coating cure ovens, each has a heat input capacity of 0.340 mmBtu/hr exhausting to stacks PEF-E4 and PEF-E5.
- (gg) One (1) surface coating line, identified as X-033, including:
 - (1) one (1) surface coating booth, equipped with one (1) high volume low pressure (HVLP) spray gun, applying surface coatings to rubber parts at a maximum design rate of 0.15 gallons per hour, with particulate emissions controlled by a dry filter system, with emissions exhausted through Stack PEF-D2, and
 - (2) one (1) electric curing oven.
- (hh) One (1) SDM EE extrusion line, identified as emission unit X-035, with a capacity of 1,289 pounds of rubber per hour, including:
 - (1) Two (2) natural gas-fired microwave curing ovens, exhausting to vents PEV-E3 and PEV-E4, capacity: 0.143 million British thermal unit per hour, each.
 - (2) Two (2) natural gas-fired hot air rubber curing ovens, exhausting to stacks PEF-E7 and PEF-E8, capacity: 0.850 million British thermal unit per hour, each.
 - (3) One (1) wire metal system, consisting of two (2) natural gas-fired burners, exhausting to stack PEF-E9, capacity: 0.375 million British thermal unit per hour, each.
- (ii) One (1) spray line, identified as X-036, equipped with six (6) high volume, low pressure (HVLP) spray guns, using dry filters as controls and exhausting to Stack PEF-E10, with two (2) 0.340 million British thermal unit per hour natural gas-fired coating cure ovens, capacity: 10 grams per minute of coating per gun.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Pellet Lines Mixing Mills A, C, D and E [326 IAC 6-3]
- (b) Pelletizers and Tumblers [326 IAC 6-3]
- (c) Dango Mixing Mills B and F [326 IAC 6-3]
- (d) Color Mixing Mill [326 IAC 6-3]
- (e) SDM Finishing Drill and Fastener Inserter Units [326 IAC 6-3]
- (f) Mold Tech Repair Sandblast Unit [326 IAC 6-3]
- (g) Mold Tech Repair Weld and Metalworking Equipment [326 IAC 6-3]
- (h) Dango Barwell Extruders [326 IAC 6-3]
- (i) Polymer Block Cutting Station [326 IAC 6-3]
- (j) Scrap Cardboard Bailing Unit [326 IAC 6-3]
- (k) Weld Shop Equipment [326 IAC 6-3]
- (l) CV Annealing Oven [326 IAC 6-3]
- (m) Silicone Coating Mixing Station [326 IAC 6-3]
- (n) Die Room Metalworking Equipment [326 IAC 6-3]
- (o) SDM Mezzanine Units [326 IAC 6-3]

Facility Description [326 IAC 2-7-5(15)]: (continued)

- (l) One (1) urethane application line, identified as emission unit X023, constructed in 1997, equipped with six (6) spray guns and one (1) blown air dryer, and exhausting at stack PEV-A25, capacity: 10 grams of coating per minute per gun.
- (m) One (1) portable spray booth for urethane coating, identified as emission unit X024, constructed in 1996, equipped with one (1) high volume-low pressure (HVLP) spray applicators and exhausting to a dry filter, capacity: 10 grams of coating per minute per gun.
- (n) One (1) waterborne urethane coating booth, identified as Line 4, equipped with dry filters and exhausting to stack PEV-A24, capacity: 0.45 gallons per hour.
- (o) One (1) waterborne urethane coating booth, identified as Line 7, equipped with dry filters and exhausting to stack PEV-A25, capacity: 1.36 gallons per hour.
- (p) One (1) waterborne urethane coating booth, identified as Small Robot, equipped with dry filters and exhausting to stack PEV-A26, capacity: 0.15 gallons per hour.
- (gg) One (1) surface coating line, identified as X-033, including:
 - (1) one (1) surface coating booth, equipped with one (1) high volume low pressure (HVLP) spray gun, applying surface coatings to rubber parts at a maximum design rate of 0.15 gallons per hour, with particulate emissions controlled by a dry filter system, with emissions exhausted through Stack PEF-D2, and
 - (2) one (1) electric curing oven.
- (ff) One (1) spray line identified as X-034, equipped with six (6) High Volume Low Pressure (HVLP) spray guns, using dry filters to control PM overspray emissions, exhausting to stack PEF-E3, and two (2) natural gas-fired coating cure ovens, each has a heat input capacity of 0.340 mmBtu/hr exhausting to stacks PEF-E4 and PEF-E5.
- (ii) One (1) spray line, identified as X-036, equipped with six (6) high volume, low pressure (HVLP) spray guns, using dry filters as controls and exhausting to Stack PEF-E10, with two (2) 0.340 million British thermal unit per hour natural gas-fired coating cure ovens, capacity: 10 grams per minute of coating per gun.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6][326 IAC 2-2]

- (a) Pursuant to CP 087-9388-00031, issued on January 28, 1999, the VOC delivered to the applicators of the one (1) spray coating line, identified as emission unit X025, minus the VOC recovered, shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period. Therefore, the best available control technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) does not apply to that emission unit.
- (b) Any change or modification at the spray booths (Lines 2, 3, 5 and 6), two (2) CV finishing

touchup stations (X004), urethane application lines (X020, X021, X023), the portable spray booth or the three (3) waterborne urethane coating booths (Lines 4 and 7 and Small Robot) that increases the potential to emit VOC at the facility to twenty-five (25) tons per year or more may cause the source to become subject to 326 IAC 8-1-6 and prior approval is required.

- (c) Pursuant to 326 IAC 8-1-6, New facilities; General reduction requirements, the best available control technology (BACT) for the seven (7) CV finishing touchup stations (X003) and two (2) silicone application lines (X001 and X019) shall be as follows:
- (1) The total VOC usage at the one (1) spray coating line (X025), four (4) spray booths (Lines 2, 3, 5 and 6), two (2) silicone application lines (X001 and X019), nine (9) CV finishing touchup stations (X003 and X004), three (3) urethane application lines (X020, X021, X023), one (1) portable spray booth and three (3) waterborne urethane coating booths (Lines 4 and 7 and Small Robot) shall be limited to less than 183 tons per consecutive twelve (12) month period. This is a BACT limit for the seven (7) CV finishing touchup stations (X003) and two (2) silicone application lines (X001 and X019).
 - (2) All coating, urethane and silicone application devices at these facilities or shall be drip; high volume, low pressure (HVLP) spray guns; or a coating application device at least as efficient. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.
 - (3) All VOC containing containers shall be kept covered when not in use.
- (d) The VOC usage at the total of all facilities in this section, excluding combustion, shall be limited to less than 161 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This VOC limitation, in combination with potential VOC emissions of 83.6 tons per year from extruding and curing, 1.90 tons per year from mixing and milling, 2.0 tons per year from insignificant activities and 1.08 tons per year from combustion, will limit the total VOC emitted at this source to less than 250 tons per year and this source will remain a minor source pursuant to 326 IAC 2-2, Prevention of Significant Deterioration.
- (e) Any change or modification which may increase the VOC potential emissions from spray line, X-034 to 25 tons per year or greater shall be subject to 326 IAC 8-1-6 (General Reduction Requirements) and must be approved by the Office of Air Quality (OAQ) before such change may occur.
- (f) Any change or modification which may increase the VOC potential emissions from spray line, X-036 to 25 tons per year or greater shall be subject to 326 IAC 8-1-6 (General Reduction Requirements) and must be approved by the Office of Air Quality (OAQ) before such change may occur.

D.1.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1-1]

- (a) Pursuant to CP 087-9388-00031, issued on January 28, 1999, each individual hazardous air pollutant (HAP) delivered to the applicators of the one (1) spray coating line, identified as emission unit X025, minus the amount of that HAP recovered, shall be limited to less than ten (10) tons per consecutive twelve (12) month period.
- (b) Pursuant to CP 087-9388-00031, issued on January 28, 1999, any combination of HAPs delivered to the applicators of the one (1) spray coating line, identified as emission unit X025,

minus the total HAPs recovered, shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

Therefore, the requirements of 326 IAC 2-4.1-1, New Source Toxics Control, are not applicable.

D.1.3 Particulate Matter (PM) [326 IAC 6-3-2]

The PM from the one (1) spray coating line (X025), one (1) surface coating line (X-033), four (4) spray booths (Lines 2, 3, 5 and 6), two (2) silicone application lines (X001 and X019), nine (9) CV finishing touchup stations (X003 and X004), three (3) urethane application lines (X020, X021, X023), one (1) portable spray booth, three (3) waterborne urethane coating booths (Lines 4 and 7 and Small Robot) and spray line X-034 shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and all control devices.

Compliance Determination Requirements

D.1.5 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs)

Compliance with the VOC and HAP usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.6 VOC and HAP Emissions

Compliance with Conditions D.1.1 and D.1.2 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

D.1.7 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the spray booths exhausting to those dry filters are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.8 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the spray booth stacks (PEV-A27, PEV-A28, PEV-A29, PEV-A30 and PEF-E3) while one (1) or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.9 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and the VOC emission limits established in Condition D.1.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

- (2) The cleanup solvent usage for each month;
 - (3) The total VOC usage for each month; and
 - (4) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP usage limits and the HAP emission limits established in Condition D.1.2.
 - (1) The amount and HAP content of each coating material and solvent used at the one (1) spray coating line, identified as emission unit X025. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) The cleanup solvent usage for each month;
 - (3) The individual and total HAP usage for each month; and
 - (4) The weight of individual and total HAPs emitted for each compliance period.
- (c) To document compliance with Conditions D.1.7 and D.1.8, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Facility Description [326 IAC 2-7-5(15)]: (continued)

- (bb) One (1) SDM EC extrusion line, identified as emission unit X016, constructed in 1994, equipped with one (1) sponge extruder, one (1) dense extruder, one (1) sponge extruder feed hopper, one (1) 1.19 million British thermal units per hour natural gas-fired core metal heater, one (1) carrier dryer, one (1) curing oven, one (1) 1.99 million British thermal units per hour natural gas-fired deodorizing furnace, one (1) bead recovery dryer, and one (1) bead blow off station, with the sponge extruder feed hopper exhausting to a fabric filter identified as CE-04 and exhausting to stack PEF-B5, the core metal heater exhausting to stack PEF-B4, the deodorizing furnace exhausting to stack PEV-B11, the curing oven exhausting to stack PEF-B1, and the bead recovery dryer exhausting and the bead blow off station exhausting to stack PEV-B4, maximum capacity: 400 pounds of rubber per hour, 400 pounds of color ribbon per hour, 350 pounds of metal strip per hour, and 50 pounds of carrier per hour.
- (ee) One (1) SDM ED extrusion line, identified as emission unit X-033, with a maximum capacity of 1,289 pounds of rubber per hour, equipped with two (2) natural gas-fired microwave curing ovens, each has a heat input capacity of 0.143 million British Thermal Units per hour (mmBtu/hr), exhausting to vents PEV-E1 and PEV-E2; two (2) natural gas-fired hot air rubber curing ovens, each has a heat input capacity of 0.850 mmBtu/hr exhausting to stacks PEF-E1 and PEF-E2; and one wire metal system consisting of two (2) natural gas-fired burners, each has a heat input capacity of 0.375 mmBtu/hr and exhausting to stack PEF-E6.
- (hh) One (1) SDM EE extrusion line, identified as emission unit X-035, with a capacity of 1,289 pounds of rubber per hour, including:
- (1) Two (2) natural gas-fired microwave curing ovens, exhausting to vents PEV-E3 and PEV-E4, capacity: 0.143 million British thermal unit per hour, each.
 - (2) Two (2) natural gas-fired hot air rubber curing ovens, exhausting to stacks PEF-E7 and PEF-E8, capacity: 0.850 million British thermal unit per hour, each.
 - (3) One (1) wire metal system, consisting of two (2) natural gas-fired burners, exhausting to stack PEF-E9, capacity: 0.375 million British thermal unit per hour, each.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X005) shall not exceed 0.882 pound per hour when operating at a process weight rate of 202 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X006) shall not exceed 0.882 pound per hour when operating at a process weight rate of 202 pounds per hour.
- (c) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X007) shall not exceed 0.882 pounds per hour when operating at a process weight rate of 202 pounds per hour.

- (d) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X008) shall not exceed 0.882 pounds per hour when operating at a process weight rate of 202 pounds per hour.
- (e) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X009) shall not exceed 1.40 pounds per hour when operating at a process weight rate of 402 pounds per hour.
- (f) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X010) shall not exceed 1.40 pounds per hour when operating at a process weight rate of 402 pounds per hour.
- (g) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X011) shall not exceed 1.83 pounds per hour when operating at a process weight rate of 602 pounds per hour.
- (h) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X012) shall not exceed 1.40 pounds per hour when operating at a process weight rate of 402 pounds per hour.
- (i) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X013) shall not exceed 1.40 pounds per hour when operating at a process weight rate of 402 pounds per hour.
- (j) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the SDM EA extrusion line (X014) shall not exceed 2.91 pounds per hour when operating at a process weight rate of 1,200 pounds per hour.
- (k) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the SDM EB extrusion line (X015) shall not exceed 2.91 pounds per hour when operating at a process weight rate of 1,200 pounds per hour.
- (l) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the SDM EC extrusion line (X016) shall not exceed 2.91 pounds per hour when operating at a process weight rate of 1,200 pounds per hour.
- (m) Pursuant to 326 IAC 6-3, the PM emissions from the extruder line, X-033 shall be limited to 3.05 pounds per hour at process weight rate of 1,289 pounds per hour (0.64 tons/hour).

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Compliance Determination Requirements

D.2.2 Particulate Matter (PM)

The fabric filters (CE-03 and CE-04) for PM control shall be in operation and control emissions from the

all facilities listed in this section as exhausting to that filter at all times that the facilities are in operation.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
AIR COMPLIANCE BRANCH**

Part 70 Quarterly Report

Source Name: Nishikawa Standard Company
Source Address: 324 Morrow Street, Topeka, Indiana 46571
Mailing Address: 324 Morrow Street, Topeka, Indiana 46571
Part 70 Permit No.: T 087-7182-00031
Facilities: Spray coating line (X025), spray booths (Lines 2, 3, 5 and 6), silicone application lines (X001 and X019), nine (9) CV finishing touchup stations (X003 and X004), urethane application lines (X020, X021, X023), portable spray booth, three (3) waterborne urethane coating booths (Lines 4 and 7 and Small Robot), one (1) surface coating line (X-033), and two (2) spray lines (X-034 and X-036)
Parameter: Total VOC usage
Limit: Less than 161 tons per consecutive twelve (12) month period

YEAR: _____

Month	VOC Usage (tons)	VOC Usage (tons)	VOC Usage (tons)
	This Month	Previous 11 Months	12 Month Total

- 9 No deviation occurred in this quarter.
9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

November 27, 2002

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Minor Source and Significant Permit Modifications

Source Background and Description

Source Name:	Nishikawa Standard Company
Source Location:	324 Morrow Street, Topeka, Indiana 46571
County:	LaGrange
SIC Code:	3069
Operation Permit No.:	T 087-7182-00031
Operation Permit Issuance Date:	April 12, 2001
Minor Source Modification No.:	087-16188-00031
Significant Permit Modification No.:	087-16667-00031
Permit Reviewer:	CarrieAnn Paukowits

The Office of Air Quality (OAQ) has reviewed a modification application from Nishikawa Standard Company relating to the construction and operation of the following emission units and pollution control devices:

- (a) One (1) SDM EE extrusion line, identified as emission unit X-035, with a capacity of 1,289 pounds of rubber per hour, including:
 - (1) Two (2) natural gas-fired microwave curing ovens, exhausting to vents PEV-E3 and PEV-E4, capacity: 0.143 million British thermal unit per hour, each.
 - (2) Two (2) natural gas-fired hot air rubber curing ovens, exhausting to stacks PEF-E7 and PEF-E8, capacity: 0.850 million British thermal unit per hour, each.
 - (3) One (1) wire metal system, consisting of two (2) natural gas-fired burners, exhausting to stack PEF-E9, capacity: 0.375 million British thermal unit per hour, each.
- (b) One (1) spray line, identified as X-036, equipped with six (6) high volume, low pressure (HVL) spray guns, using dry filters as controls and exhausting to Stack PEF-E10, with two (2) 0.340 million British thermal unit per hour natural gas-fired coating cure ovens, capacity: 10 grams per minute of coating per gun.

History

On October 2, 2002, Nishikawa Standard Company submitted an application to the OAQ requesting to add an additional extrusion line and an additional spray line at their existing plant. Nishikawa Standard Company was issued a Part 70 permit on April 12, 2001. That Part 70 permit incorporated the changes approved under the First Minor Source Modification 087-11820, issued on March 15, 2000, and the First Significant Source Modification 087-12244, issued on July 19, 2000. A Second Minor Source Modification, 087-14331, was issued on July 24, 2001, and was incorporated into the Part 70 permit in the First Minor Permit Modification 087-14376, issued on July 20, 2001. An Administrative

Amendment, 087-15216, was issued on January 24, 2002.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
PEV-E3	Microwave Curing Oven	35.0	1.33	N/A	482
PEV-E4	Microwave Curing Oven	35.0	1.33	N/A	482
PEF-E7	Hot Air Rubber Curing Oven	35.0	1.50	4,400	644
PEF-E8	Hot Air Rubber Curing Oven	35.0	1.50	4,400	644
PEF-E10	Spray Line (X-036)	35.0	1.00	1,200	Ambient
PEF-E11	Coating Cure Oven	35.0	1.33	3,000	450
PEF-E12	Coating Cure Oven	35.0	1.33	3,000	450
PEF-E9	Wire Metal System	35.0	1.00	250	260

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification and Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 2, 2002.

Emission Calculations

See pages 1 through 5 of 5 of Appendix A of this document for detailed emissions calculations.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	1.90
PM ₁₀	1.98
SO ₂	0.009
VOC	14.4
CO	1.26
NO _x	1.50

HAPs	Potential To Emit (tons/year)
Carbon Disulfide	3.63
Ethylene Glycol	0.209
1,1,1-Trichloroethane	8.07E-5
1,1-Dichloroethene	3.03E-4
MEK	0.007
2-Butanone	0.002
MIBK	3.84E-4
Acetophenone	1.20
Acrylonitrile	2.06E-4
Aniline	0.001
Carbon Disulfide	3.71
Carbonyl Sulfide	0.068
Chloromethane	1.13E-4
Chromium	1.54E-6
Cumene	0.001
Di-n-butylphthalate	2.26E-5
Ethylbenzene	3.34E-4
Hexane	0.022
Isooctane	7.45E-4
Xylenes	0.304
Methylene Chloride	0.021
Naphthalene	0.006

HAPs	Potential To Emit (tons/year)
Nickel	1.17E-5
Phenol	0.002
Styrene	0.002
Tetrachloroethene	2.34E-4
Toluene	0.029
Benzene	0.276
Biphenyl	0.002
bis (2-ethylhexyl) phthalate	0.002
Dibenzofuran	0.012
Dimethylphthalate	0.0002
TOTAL	5.98

Justification for Modification

The Part 70 Operating Permit is being modified through a Part 70 Minor Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(d)(4), modifications that would have a potential to emit less than twenty-five (25) tons per year and equal to or greater than ten (10) tons per year of volatile organic compounds (VOC). The proposed operating conditions shall be incorporated into the Part 70 Operating Permit as a Significant Permit Modification (SPM 087-16667-00031) in accordance with 326 IAC 2-7-12(d)(1). Pursuant to 326 IAC 2-7-12(b)(1)(C), the permit modification is not a Minor Permit Modification because it does require or change a case-by-case determination of an emission limitation or other standard; in this case, the limit to keep the source a minor source pursuant to 326 IAC 2-2, PSD. The Significant Permit Modification will give the source approval to operate the proposed emission units.

County Attainment Status

The source is located in LaGrange County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC

emissions are considered when evaluating the rule applicability relating to the ozone standards. LaGrange County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

- (b) LaGrange County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	142
PM ₁₀	143
SO ₂	1.10
VOC	less than 250
CO	17.1
NO _x	20.1

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon the potential emissions based on the Technical Support Document to T 087-7182-00031, issued on April 12, 2001, Second Minor Source Modification 087-14331, issued on July 24, 2001, and Administrative Amendment 087-15216, issued on January 24, 2002, as well as the limited potential to emit VOC based on the existing permit.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Proposed Modification	1.90	1.98	0.009	14.4	1.26	1.50	5.98
PSD Threshold Level	250	250	250	250	250	250	-

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20, 40 CFR 61 and 40 CFR Part 63) applicable to this proposed modification.
- (c) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are not applicable to this source because the source does not include one or more units that belong to one or more source categories affected by the Section 112(j) MACT Hammer date of May 15, 2002.

State Rule Applicability - Individual Facilities

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

The applicant has requested that the total potential to emit VOC continue to be limited to less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2, PSD, are not applicable. The limit on the VOC usage in Section D.1 is modified to account for the increased potential to emit VOC due to the new extrusion line and new combustion facilities. The limitations are as follows:

- (a) The VOC usage at the total of all surface coating operations shall be limited to less than 161 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This VOC limitation, in combination with potential VOC emissions of 83.6 tons per year from extruding and curing, 1.90 tons per year from mixing and milling, 2.0 tons per year from insignificant activities and 1.08 tons per year from combustion, will limit the total VOC emitted at this source to less than 250 tons per year and this source is not a major source pursuant to 326 IAC 2-2, PSD.
- (b) The potentials to emit PM, PM₁₀, NO_x, SO₂ and CO are each less than 250 tons per year. Therefore, no limitations for those pollutants are necessary to make 326 IAC 2-2, PSD, not applicable.

The following table illustrates the revised potential to emit each pollutant from this source based on the limitations in the permit. The values for VOC from surface coating and HAPs from spray line X-025 are based on the limitations in the permit. All other values represent the unrestricted potential to emit.

Process/facility	Potential to Emit (tons/year)						
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Surface Coating, including combustion	96.1	96.5	0.038	less than 161 plus 0.343 from combustion	5.24	6.24	X025: Single <10 Total < 25 All others: 41.1, xylenes 46.9, total
Extrusion Lines, including combustion	33.5	34.1	0.071	83.6 plus 0.732 from combustion	11.2	13.4	50.3, individual 85.6, total
One (1) mixing department (X017)	2.28	2.28	0.00	1.09	0.00	0.00	0.345
One (1) mixing department (X018)	1.69	1.69	0.00	0.810	0.00	0.00	0.256
Insignificant Activities	10.0	10.0	1.00	2.00	2.00	2.00	1.00
Total Emissions	144	145	1.11	less than 250	18.4	21.6	51.1 individual 159 total

326 IAC 2-4.1-1 (New Source Toxics Control)

The potential to emit each individual hazardous air pollutant (HAP) is less than 10 tons per year from the one (1) SDM EE extrusion line, identified as X-035, and the one (1) spray line, identified as X-036, and the potential to emit any combination of HAPs from those facilities is less than 25 tons per year. Therefore, the requirements of 326 IAC 2-4.1-1, New Source Toxics Control, are not applicable.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

The potential PM emissions from the one (1) SDM EE extrusion line, identified as X-035, and the potential PM emissions from the one (1) spray line, identified as X-036, are less than 0.551 pounds per hour. Therefore, pursuant to 326 IAC 6-3-1(b)(14), the new facilities are exempt from the requirements of 326 IAC 6-3, Particulate Emission Limitations for Manufacturing Processes.

326 IAC 8-1-6 (New facilities; General reduction requirements)

The potential VOC emissions from the one (1) SDM EE extrusion line, identified as X-035, and the one (1) spray line, identified as X-036, are less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 are not applicable.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a

more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

There are no mandatory compliance monitoring requirements applicable to the one (1) SDM EE extrusion line, identified as X-035, and the one (1) spray line, identified as X-036.

Proposed Changes

The permit language is changed to incorporate the new extrusion line and spray line into the permit and to move the extrusion line and spray line permitted in Second Minor Source Modification 087-14331, issued on July 24, 2001, and the conditions applicable to those facilities from Section D.5 to Sections D.1 and D.2 of the permit. The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in **bold**):

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) spray coating line, identified as emission unit X025, constructed in 1997 and modified in 1999, equipped with one (1) robotic spray booth equipped with three (3) high volume-low pressure (HVLP) spray guns and exhausting to PEF-D5, one (1) 1.5 Million British thermal units per hour natural gas-fired preheat oven exhausting to PEV-D1, one (1) 2.0 Million British thermal units per hour natural gas-fired curing oven exhausting to PEV-D2, one (1) 1.5 Million British thermal units per hour natural gas-fired make-up air heater, two (2) spray guns for spraying primer, and one (1) coating prep and supply area exhausting to PEF-D4, capacity: 195 extruded rubber parts per hour.
- (b) One (1) spray booth, identified as Line 2, constructed in 2000, equipped with three (3) airless high volume-low pressure (HVLP) guns, using dry filters as control, and exhausting to one (1) stack identified as PEV-A27, maximum capacity: 3.97 pounds of waterborne urethane coating per hour.
- (c) One (1) spray booth, identified as Line 3, constructed in 2000, equipped with three (3) airless high volume-low pressure (HVLP) guns, using dry filters as control, and exhausting to one (1) stack identified as PEV-A28, maximum capacity: 3.97 pounds of waterborne urethane coating per hour.
- (d) One (1) spray booth, identified as Line 5, constructed in 2000, equipped with six (6) airless

high volume-low pressure (HVLP) guns, using dry filters as control, and exhausting to one (1) stack identified as PEV-A29, maximum capacity: 7.93 pounds of waterborne urethane coating per hour.

- (e) One (1) spray booth, identified as Line 6, constructed in 2000, equipped with six (6) airless high volume-low pressure (HVLP) guns, using dry filters as control, and exhausting to one (1) stack identified as PEV-A30, maximum capacity: 7.93 pounds of waterborne urethane coating per hour.
- (f) One (1) silicone application line, identified as line 1, emission unit X001, constructed in 1993, equipped with four (4) drip applicators and one (1) drying oven rated at 4.9 million British thermal units per hour, and exhausting at stacks PEV-A8 and PEV-A16, maximum capacity: 0.00086 gallons per meter and 4,080 meters per hour.
- (g) Seven (7) CV finishing touchup stations, identified as emission unit X003, constructed in 1990, equipped with seven (7) electric dryers and exhausting at stack PEF-D2, maximum capacity: 2 pounds of coating per hour per station.
- (h) Two (2) CV finishing touchup stations, identified as emission unit X004, constructed in 1990, equipped with two (2) electric dryers and exhausting at stack PEF-D1, maximum capacity: 2 pounds of coating per hour per station.
- (i) One (1) silicone application line, identified as emission unit X019, constructed in 1994, equipped with five (5) spray guns and drip applicators and one (1) natural gas-fired drying oven rated at 2.0 million British thermal units per hour, and exhausting at stacks PEV-B1, PEV-B2, and PEV-B3, maximum capacity: 0.00086 gallons per meter and 4,080 meters per hour for the drip and wipe and 10 grams of coating per minute per gun for the spray application.
- (j) One (1) urethane application line, identified as emission unit X020, constructed in 1996, equipped with six (6) spray guns and one (1) blown air dryer, and exhausting at stack PEV-A21, capacity: 10 grams of coating per minute per gun.
- (k) One (1) urethane application line, identified as emission unit X021, constructed in 1996, equipped with three (3) spray guns and one (1) blown air dryer, one (1) 1.0 MM Btu/hr natural gas fired curing oven, and exhausting at stack PEV-B12, capacity: 10 grams of coating per minute per gun.
- (l) One (1) urethane application line, identified as emission unit X023, constructed in 1997, equipped with six (6) spray guns and one (1) blown air dryer, and exhausting at stack PEV-A25, capacity: 10 grams of coating per minute per gun.
- (m) One (1) portable spray booth for urethane coating, identified as emission unit X024, constructed in 1996, equipped with one (1) high volume, low pressure (HVLP) spray applicators and exhausting to a dry filter, capacity: 10 grams of coating per minute per gun.
- (n) One (1) waterborne urethane coating booth, identified as Line 4, equipped with dry filters and exhausting to stack PEV-A24, capacity: 0.45 gallons per hour.
- (o) One (1) waterborne urethane coating booth, identified as Line 7, equipped with dry filters and exhausting to stack PEV-A25, capacity: 1.36 gallons per hour.

- (p) One (1) waterborne urethane coating booth, identified as Small Robot, equipped with dry filters and exhausting to stack PEV-A26, capacity: 0.15 gallons per hour.
- (q) One (1) CV extrusion line, identified as line 1, emission unit X005, constructed in 1987, equipped with one (1) extruder, one (1) feed hopper, one (1) duster, one (1) curing oven, one (1) 1.59 million British thermal units per hour natural gas-fired deodorizing furnace and one (1) 0.298 million British thermal units per hour natural gas-fired core metal heater, with the duster and hopper exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with all other operations exhausting at stack PEF-A3, maximum capacity: 200 pounds of rubber per hour and 2 pounds of talc per hour.
- (r) One (1) CV extrusion line, identified as line 2, emission unit X006, constructed in 1987, equipped with one (1) extruder, one (1) feed hopper, one (1) duster, one (1) curing oven, one (1) 1.59 million British thermal units per hour natural gas-fired deodorizing furnace and one (1) 0.298 million British thermal units per hour natural gas-fired core metal heater, with the duster and hopper exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with all other operations exhausting at stack PEF-A3, maximum capacity: 200 pounds of rubber per hour and 2 pounds of talc per hour.
- (s) One (1) CV extrusion line, identified as line 3, emission unit X007, constructed in 1987, equipped with one (1) extruder, one (1) feed hopper, one (1) duster, one (1) curing oven, one (1) 1.59 million British thermal units per hour natural gas-fired deodorizing furnace and one (1) 0.298 million British thermal units per hour natural gas-fired core metal heater, with the duster and hopper exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with all other operations exhausting at stack PEF-A3, maximum capacity: 200 pounds of rubber per hour and 2 pounds of talc per hour.
- (t) One (1) CV extrusion line, identified as line 4, emission unit X008, constructed in 1988, equipped with one (1) extruder, one (1) feed hopper, one (1) duster, one (1) curing oven, one (1) 1.59 million British thermal units per hour natural gas-fired deodorizing furnace and one (1) 0.298 million British thermal units per hour natural gas-fired core metal heater, with the duster and hopper exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with all other operations exhausting at stack PEF-A3, maximum capacity: 200 pounds of rubber per hour and 2 pounds of talc per hour.
- (u) One (1) CV extrusion line, identified as line 5, emission unit X009, constructed in 1989, equipped with two (2) extruders, two (2) feed hoppers, one (1) duster, one (1) curing oven, and one (1) 1.59 million British thermal units per hour natural gas-fired deodorizing furnace, with the duster and hoppers exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with all other operations exhausting at stacks PEF-A9, PEV-A10 and PEV-A20, maximum capacity: 400 pounds of rubber per hour and 2 pounds of talc per hour.
- (v) One (1) CV extrusion line, identified as line 6, emission unit X010, constructed in 1989, equipped with two (2) extruders, two (2) feed hoppers, one (1) duster, one (1) curing oven, and one (1) 1.59 million British thermal units per hour natural gas-fired deodorizing furnace, with the duster and hoppers exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with all other operations exhausting at stacks PEF-A1, PEV-A15 and PEV-A20, maximum capacity: 400 pounds of rubber per hour and 2 pounds of talc per hour.
- (w) One (1) CV extrusion line, identified as line 7, emission unit X011, constructed in 1991, equipped with three (3) extruders, three (3) feed hoppers, one (1) duster, one (1) curing oven,

and one (1) 1.59 million British thermal units per hour natural gas-fired deodorizing furnace, with the duster and hoppers exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with all other operations exhausting at stacks PEF-A1 and PEV-A5, maximum capacity: 600 pounds of rubber per hour and 2 pounds of talc per hour.

- (x) One (1) CV extrusion line, identified as line 8, emission unit X012, constructed in 1995, equipped with four (4) extruders, two (2) feed hoppers, two (2) electroless dusters, and one (1) 1.59 million British thermal units per hour natural gas-fired vulcanizing oven, with the dusters exhausting to a fabric filter identified as CE-05 and exhausting inside, and the hoppers exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with the vulcanizing oven exhausting at stacks PEV-A4, PEV-A3 and PEV-A2, maximum capacity: 400 pounds of rubber per hour and 2 pounds of sodium bicarbonate per hour.
- (y) One (1) CV extrusion line, identified as line 9, emission unit X013, constructed in 1995, equipped with four (4) extruders, two (2) feed hoppers, two (2) electroless dusters, and one (1) 1.59 million British thermal units per hour natural gas-fired vulcanizing oven, with the dusters exhausting to a fabric filter identified as CE-06 and exhausting inside, and the hoppers exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with the vulcanizing oven exhausting at stacks PEV-A17, PEV-A18 and PEV-A19, maximum capacity: 400 pounds of rubber per hour and 2 pounds of sodium bicarbonate per hour.
- (z) One (1) SDM EA extrusion line, identified as emission unit X014, constructed in 1987, equipped with one (1) sponge extruder, one (1) dense extruder, one (1) sponge extruder feed hopper, one (1) 1.19 million British thermal units per hour natural gas-fired core metal heater, one (1) carrier dryer, one (1) curing oven, one (1) 1.99 million British thermal units per hour natural gas-fired deodorizing furnace, one (1) bead recovery dryer, and one (1) bead blow off station, with the sponge extruder feed hopper exhausting to a fabric filter identified as CE-04 and exhausting to stack PEF-B5, the core metal heater exhausting to stack PEF-B7, the deodorizing furnace exhausting to stack PEV-B9, the curing oven exhausting to stack PEF-B3, the bead recovery dryer exhausting to stack PEV-B7, and the bead blow off station exhausting to stack PEV-B8, maximum capacity: 400 pounds of rubber per hour, 400 pounds of color ribbon per hour, 350 pounds of metal strip per hour, and 50 pounds of carrier per hour.
- (aa) One (1) SDM EB extrusion line, identified as emission unit X015, constructed in 1989, equipped with one (1) sponge extruder, one (1) dense extruder, one (1) sponge extruder feed hopper, one (1) 1.19 million British thermal units per hour natural gas-fired core metal heater, one (1) carrier dryer, one (1) curing oven, one (1) 1.99 million British thermal units per hour natural gas-fired deodorizing furnace, one (1) bead recovery dryer, and one (1) bead blow off station, with the sponge extruder feed hopper exhausting to a fabric filter identified as CE-04 and exhausting to stack PEF-B5, the core metal heater exhausting to stack PEF-B6, the deodorizing furnace exhausting to stack PEV-B10, the curing oven exhausting to stack PEF-B2, the bead recovery dryer exhausting to stack PEV-B5, and the bead blow off station exhausting to stack PEV-B6, maximum capacity: 400 pounds of rubber per hour, 400 pounds of color ribbon per hour, 350 pounds of metal strip per hour, and 50 pounds of carrier per hour.
- (bb) One (1) SDM EC extrusion line, identified as emission unit X016, constructed in 1994, equipped with one (1) sponge extruder, one (1) dense extruder, one (1) sponge extruder feed hopper, one (1) 1.19 million British thermal units per hour natural gas-fired core metal heater, one (1) carrier dryer, one (1) curing oven, one (1) 1.99 million British thermal units per hour natural gas-fired deodorizing furnace, one (1) bead recovery dryer, and one (1) bead blow off station, with the sponge extruder feed hopper exhausting to a fabric filter identified as CE-04

and exhausting to stack PEF-B5, the core metal heater exhausting to stack PEF-B4, the deodorizing furnace exhausting to stack PEV-B11, the curing oven exhausting to stack PEF-B1, and the bead recovery dryer exhausting and the bead blow off station exhausting to stack PEV-B4, maximum capacity: 400 pounds of rubber per hour, 400 pounds of color ribbon per hour, 350 pounds of metal strip per hour, and 50 pounds of carrier per hour.

- (cc) One (1) mixing department, identified as X017, constructed in 1987, equipped with one (1) rubber weigh station, one (1) pelletizer line, two (2) mixing mills, one (1) talcing system, one (1) talc sifter unit, and one (1) pelletizing vacuum, all exhausting to a large baghouse identified as CE-01 and exhausting at stack PEF-A9, capacity: 562 pounds of rubber per hour and 4.8 pounds of talc per hour.
- (dd) One (1) mixing department, identified as X018, constructed in 1987, equipped with one (1) carbon black weigh station, two (2) mixing mills, and one (1) Barwell pelletizer line, all exhausting to a small baghouse identified as CE-02 and exhausting at stack PEF-A10, capacity: 416.7 pounds of rubber per hour, 3.2 pounds of talc per hour, and 83.3 pounds of carbon black per hour.
- (ee) One (1) SDM ED extrusion line, identified as emission unit X-033, with a maximum capacity of 1,289 pounds of rubber per hour, equipped with two (2) natural gas-fired microwave curing ovens, each has a heat input capacity of 0.143 million British thermal units per hour (mmBtu/hr), exhausting to vents PEV-E1 and PEV-E2; two (2) natural gas-fired hot air rubber curing ovens, each has a heat input capacity of 0.850 mmBtu/hr exhausting to stacks PEF-E1 and PEF-E2; and one wire metal system consisting of two (2) natural gas-fired burners, each has a heat input capacity of 0.375 mmBtu/hr and exhausting to stack PEF-E6.
- (ff) One (1) spray line identified as X-034, equipped with six (6) High Volume Low Pressure (HVLP) spray guns, using dry filters to control PM overspray emissions, exhausting to stack PEF-E3, and two (2) natural gas-fired coating cure ovens, each has a heat input capacity of 0.340 mmBtu/hr exhausting to stacks PEF-E4 and PEF-E5.
- (gg) One (1) surface coating line, identified as X-033, including:
 - (1) one (1) surface coating booth, equipped with one (1) high volume low pressure (HVLP) spray gun, applying surface coatings to rubber parts at a maximum design rate of 0.15 gallons per hour, with particulate emissions controlled by a dry filter system, with emissions exhausted through Stack PEF-D2, and
 - (2) one (1) electric curing oven.
- (hh) **One (1) SDM EE extrusion line, identified as emission unit X-035, with a capacity of 1,289 pounds of rubber per hour, including:**
 - (1) **Two (2) natural gas-fired microwave curing ovens, exhausting to vents PEV-E3 and PEV-E4, capacity: 0.143 million British thermal unit per hour, each.**
 - (2) **Two (2) natural gas-fired hot air rubber curing ovens, exhausting to stacks PEF-E7 and PEF-E8, capacity: 0.850 million British thermal unit per hour, each.**
 - (3) **One (1) wire metal system, consisting of two (2) natural gas-fired burners, exhausting to stack PEF-E9, capacity: 0.375 million British thermal unit per hour, each.**

- (ii) One (1) spray line, identified as X-036, equipped with six (6) high volume, low pressure (HVLP) spray guns, using dry filters as controls and exhausting to Stack PEF-E10, with two (2) 0.340 million British thermal unit per hour natural gas-fired coating cure ovens, capacity: 10 grams per minute of coating per gun.**

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) One (1) spray coating line, identified as emission unit X025, constructed in 1997 and modified in 1999, equipped with one (1) robotic spray booth equipped with three (3) high volume-low pressure (HVLP) spray guns and exhausting to PEF-D5, one (1) 1.5 Million British thermal units per hour natural gas-fired preheat oven exhausting to PEV-D1, one (1) 2.0 Million British thermal units per hour natural gas-fired curing oven exhausting to PEV-D2, one (1) 1.5 Million British thermal units per hour natural gas-fired make-up air heater, two (2) spray guns for spraying primer, and one (1) coating prep and supply area exhausting to PEF-D4, capacity: 195 extruded rubber parts per hour.
- (b) One (1) spray booth, identified as Line 2, constructed in 2000, equipped with three (3) airless high volume-low pressure (HVLP) guns, using dry filters as control, and exhausting to one (1) stack identified as PEV-A27, maximum capacity: 3.97 pounds of waterborne urethane coating per hour.
- (c) One (1) spray booth, identified as Line 3, constructed in 2000, equipped with three (3) airless high volume-low pressure (HVLP) guns, using dry filters as control, and exhausting to one (1) stack identified as PEV-A28, maximum capacity: 3.97 pounds of waterborne urethane coating per hour.
- (d) One (1) spray booth, identified as Line 5, constructed in 2000, equipped with six (6) airless high volume-low pressure (HVLP) guns, using dry filters as control, and exhausting to one (1) stack identified as PEV-A29, maximum capacity: 7.93 pounds of waterborne urethane coating per hour.
- (e) One (1) spray booth, identified as Line 6, constructed in 2000, equipped with six (6) airless high volume-low pressure (HVLP) guns, using dry filters as control, and exhausting to one (1) stack identified as PEV-A30, maximum capacity: 7.93 pounds of waterborne urethane coating per hour.
- (f) One (1) silicone application line, identified as line 1, emission unit X001, constructed in 1993, equipped with four (4) drip applicators and one (1) drying oven rated at 4.9 million British thermal units per hour, and exhausting at stacks PEV-A8 and PEV-A16, maximum capacity: 0.00086 gallons per meter and 4,080 meters per hour.
- (g) Seven (7) CV finishing touchup stations, identified as emission unit X003, constructed in 1990, equipped with seven (7) electric dryers and exhausting at stack PEF-D2, maximum capacity: 2 pounds of coating per hour per station.
- (h) Two (2) CV finishing touchup stations, identified as emission unit X004, constructed in 1990, equipped with two (2) electric dryers and exhausting at stack PEF-D1, maximum capacity: 2 pounds of coating per hour per station.
- (i) One (1) silicone application line, identified as emission unit X019, constructed in 1994, equipped with five (5) spray guns and drip applicators and one (1) natural gas-fired drying oven rated at 2.0 million British thermal units per hour, and exhausting at stacks PEV-B1, PEV-B2, and PEV-B3, maximum capacity: 0.00086 gallons per meter and 4,080 meters per hour for the drip and wipe and 10 grams of coating per minute per gun for the spray application.
- (j) One (1) urethane application line, identified as emission unit X020, constructed in 1996, equipped with six (6) spray guns and one (1) blown air dryer, and exhausting at stack PEV-A21, capacity: 10 grams of coating per minute per gun.
- (k) One (1) urethane application line, identified as emission unit X021, constructed in 1996, equipped with three (3) spray guns and one (1) blown air dryer, one (1) 1.0 MM Btu/hr natural gas fired curing oven, and exhausting at stack PEV-B12, capacity: 10 grams of coating per minute per gun.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Facility Description [326 IAC 2-7-5(15)]: (continued)

- (l) One (1) urethane application line, identified as emission unit X023, constructed in 1997, equipped with six (6) spray guns and one (1) blown air dryer, and exhausting at stack PEV-A25, capacity: 10 grams of coating per minute per gun.
- (m) One (1) portable spray booth for urethane coating, identified as emission unit X024, constructed in 1996, equipped with one (1) high volume-low pressure (HVLP) spray applicators and exhausting to a dry filter, capacity: 10 grams of coating per minute per gun.
- (n) One (1) waterborne urethane coating booth, identified as Line 4, equipped with dry filters and exhausting to stack PEV-A24, capacity: 0.45 gallons per hour.
- (o) One (1) waterborne urethane coating booth, identified as Line 7, equipped with dry filters and exhausting to stack PEV-A25, capacity: 1.36 gallons per hour.
- (p) One (1) waterborne urethane coating booth, identified as Small Robot, equipped with dry filters and exhausting to stack PEV-A26, capacity: 0.15 gallons per hour.
- ~~(q)~~**(gg)** One (1) surface coating line, identified as X-033, including:
 - (1) one (1) surface coating booth, equipped with one (1) high volume low pressure (HVLP) spray gun, applying surface coatings to rubber parts at a maximum design rate of 0.15 gallons per hour, with particulate emissions controlled by a dry filter system, with emissions exhausted through Stack PEF-D2, and
 - (2) one (1) electric curing oven.
- (ff) One (1) spray line identified as X-034, equipped with six (6) High Volume Low Pressure (HVLP) spray guns, using dry filters to control PM overspray emissions, exhausting to stack PEF-E3, and two (2) natural gas-fired coating cure ovens, each has a heat input capacity of 0.340 mmBtu/hr exhausting to stacks PEF-E4 and PEF-E5.**
- (ii) One (1) spray line, identified as X-036, equipped with six (6) high volume, low pressure (HVLP) spray guns, using dry filters as controls and exhausting to Stack PEF-E10, with two (2) 0.340 million British thermal unit per hour natural gas-fired coating cure ovens, capacity: 10 grams per minute of coating per gun.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.1.1 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6][326 IAC 2-2]

- (a) Pursuant to CP 087-9388-00031, issued on January 28, 1999, the VOC delivered to the applicators of the one (1) spray coating line, identified as emission unit X025, minus the VOC recovered, shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period. Therefore, the best available control technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) does not apply to that emission unit.
- (b) Any change or modification at the spray booths (Lines 2, 3, 5 and 6), two (2) CV finishing touchup stations (X004), urethane application lines (X020, X021, X023), the portable spray booth or the three (3) waterborne urethane coating booths (Lines 4 and 7 and Small Robot) that increases the potential to emit VOC at the facility to twenty-five (25) tons per year or more

may cause the source to become subject to 326 IAC 8-1-6 and prior approval is required.

- (c) Pursuant to 326 IAC 8-1-6, New facilities; General reduction requirements, the best available control technology (BACT) for the seven (7) CV finishing touchup stations (X003) and two (2) silicone application lines (X001 and X019) shall be as follows:
- (1) The total VOC usage at the one (1) spray coating line (X025), four (4) spray booths (Lines 2, 3, 5 and 6), two (2) silicone application lines (X001 and X019), nine (9) CV finishing touchup stations (X003 and X004), three (3) urethane application lines (X020, X021, X023), one (1) portable spray booth and three (3) waterborne urethane coating booths (Lines 4 and 7 and Small Robot) shall be limited to less than 183 tons per consecutive twelve (12) month period. This is a BACT limit for the seven (7) CV finishing touchup stations (X003) and two (2) silicone application lines (X001 and X019). ~~All coating and application emission units are included in this limit to limit VOC from the entire source to less than 250 tons per year and make 326 IAC 2-2 (PSD) not applicable.~~
 - (2) All coating, urethane and silicone application devices at these facilities or shall be drip; high volume, low pressure (HVLP) spray guns; or a coating application device at least as efficient. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.
 - (3) All VOC containing containers shall be kept covered when not in use.
- (d) **The VOC usage at the total of all facilities in this section, excluding combustion, shall be limited to less than 161 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.** ~~The This~~ VOC limitation ~~in this BACT~~, in combination with ~~63.5~~ **83.6** tons per year from extruding ~~and~~ curing, **1.90 tons per year** from mixing and milling, 2.0 tons per year from insignificant activities and ~~0.914~~ **1.08** tons per year from combustion, will limit the total VOC emitted at this source to less than 250 tons per year and this source will remain a minor source pursuant to 326 IAC 2-2, Prevention of Significant Deterioration.
- (e) **Any change or modification which may increase the VOC potential emissions from spray line X-034 to 25 tons per year or greater shall be subject to 326 IAC 8-1-6 (General Reduction Requirements) and must be approved by the Office of Air Quality (OAQ) before such change may occur.**
- (f) **Any change or modification which may increase the VOC potential emissions from spray line X-036 to 25 tons per year or greater shall be subject to 326 IAC 8-1-6 (General Reduction Requirements) and must be approved by the Office of Air Quality (OAQ) before such change may occur.**

D.1.3 Particulate Matter (PM) [326 IAC 6-3-2]

The PM from the one (1) spray coating line (X025), one (1) surface coating line (X-033), four (4) spray booths (Lines 2, 3, 5 and 6), two (2) silicone application lines (X001 and X019), nine (9) CV finishing touchup stations (X003 and X004), three (3) urethane application lines (X020, X021, X023), one (1) portable spray booth and three (3) waterborne urethane coating booths (Lines 4 and 7 and Small Robot) **and spray line X-034** shall not exceed the pound per hour emission rate established as E in the

following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.1.8 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the spray booth stacks (PEV-A27, PEV-A28, PEV-A29 and PEV-A30 and **PEF-E3**) while one (1) or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (q) One (1) CV extrusion line, identified as line 1, emission unit X005, constructed in 1987, equipped with one (1) extruder, one (1) feed hopper, one (1) duster, one (1) curing oven, one (1) 1.59 million British thermal units per hour natural gas-fired deodorizing furnace and one (1) 0.298 million British thermal units per hour natural gas-fired core metal heater, with the duster and hopper exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with all other operations exhausting at stack PEF-A3, maximum capacity: 200 pounds of rubber per hour and 2 pounds of talc per hour.
- (r) One (1) CV extrusion line, identified as line 2, emission unit X006, constructed in 1987, equipped with one (1) extruder, one (1) feed hopper, one (1) duster, one (1) curing oven, one (1) 1.59 million British thermal units per hour natural gas-fired deodorizing furnace and one (1) 0.298 million British thermal units per hour natural gas-fired core metal heater, with the duster and hopper exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with all other operations exhausting at stack PEF-A3, maximum capacity: 200 pounds of rubber per hour and 2 pounds of talc per hour.
- (s) One (1) CV extrusion line, identified as line 3, emission unit X007, constructed in 1987, equipped with one (1) extruder, one (1) feed hopper, one (1) duster, one (1) curing oven, one (1) 1.59 million British thermal units per hour natural gas-fired deodorizing furnace and one (1) 0.298 million British thermal units per hour natural gas-fired core metal heater, with the duster and hopper exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with all other operations exhausting at stack PEF-A3, maximum capacity: 200 pounds of rubber per hour and 2 pounds of talc per hour.
- (t) One (1) CV extrusion line, identified as line 4, emission unit X008, constructed in 1988, equipped with one (1) extruder, one (1) feed hopper, one (1) duster, one (1) curing oven, one (1) 1.59 million British thermal units per hour natural gas-fired deodorizing furnace and one (1) 0.298 million British thermal units per hour natural gas-fired core metal heater, with the duster and hopper exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with all other operations exhausting at stack PEF-A3, maximum capacity: 200 pounds of rubber per hour and 2 pounds of talc per hour.
- (u) One (1) CV extrusion line, identified as line 5, emission unit X009, constructed in 1989, equipped with two (2) extruders, two (2) feed hoppers, one (1) duster, one (1) curing oven, and one (1) 1.59 million British thermal units per hour natural gas-fired deodorizing furnace, with the duster and hoppers exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with all other operations exhausting at stacks PEF-A9, PEV-A10 and PEV-A20, maximum capacity: 400 pounds of rubber per hour and 2 pounds of talc per hour.
- (v) One (1) CV extrusion line, identified as line 6, emission unit X010, constructed in 1989, equipped with two (2) extruders, two (2) feed hoppers, one (1) duster, one (1) curing oven, and one (1) 1.59 million British thermal units per hour natural gas-fired deodorizing furnace, with the duster and hoppers exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with all other operations exhausting at stacks PEF-A1, PEV-A15 and PEV-A20, maximum capacity: 400 pounds of rubber per hour and 2 pounds of talc per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Facility Description [326 IAC 2-7-5(15)]: (continued)

- (w) One (1) CV extrusion line, identified as line 7, emission unit X011, constructed in 1991, equipped with three (3) extruders, three (3) feed hoppers, one (1) duster, one (1) curing oven, and one (1) 1.59 million British thermal units per hour natural gas-fired deodorizing furnace, with the duster and hoppers exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with all other operations exhausting at stacks PEF-A1 and PEV-A5, maximum capacity: 600 pounds of rubber per hour and 2 pounds of talc per hour.
- (x) One (1) CV extrusion line, identified as line 8, emission unit X012, constructed in 1995, equipped with four (4) extruders, two (2) feed hoppers, two (2) electroless dusters, and one (1) 1.59 million British thermal units per hour natural gas-fired vulcanizing oven, with the dusters exhausting to a fabric filter identified as CE-05 and exhausting inside, and the hoppers exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with the vulcanizing oven exhausting at stacks PEV-A4, PEV-A3 and PEV-A2, maximum capacity: 400 pounds of rubber per hour and 2 pounds of sodium bicarbonate per hour.
- (y) One (1) CV extrusion line, identified as line 9, emission unit X013, constructed in 1995, equipped with four (4) extruders, two (2) feed hoppers, two (2) electroless dusters, and one (1) 1.59 million British thermal units per hour natural gas-fired vulcanizing oven, with the dusters exhausting to a fabric filter identified as CE-06 and exhausting inside, and the hoppers exhausting to a fabric filter identified as CE-03 and exhausting to stack PEF-A2, with the vulcanizing oven exhausting at stacks PEV-A17, PEV-A18 and PEV-A19, maximum capacity: 400 pounds of rubber per hour and 2 pounds of sodium bicarbonate per hour.
- (z) One (1) SDM EA extrusion line, identified as emission unit X014, constructed in 1987, equipped with one (1) sponge extruder, one (1) dense extruder, one (1) sponge extruder feed hopper, one (1) 1.19 million British thermal units per hour natural gas-fired core metal heater, one (1) carrier dryer, one (1) curing oven, one (1) 1.99 million British thermal units per hour natural gas-fired deodorizing furnace, one (1) bead recovery dryer, and one (1) bead blow off station, with the sponge extruder feed hopper exhausting to a fabric filter identified as CE-04 and exhausting to stack PEF-B5, the core metal heater exhausting to stack PEF-B7, the deodorizing furnace exhausting to stack PEV-B9, the curing oven exhausting to stack PEF-B3, the bead recovery dryer exhausting to stack PEV-B7, and the bead blow off station exhausting to stack PEV-B8, maximum capacity: 400 pounds of rubber per hour, 400 pounds of color ribbon per hour, 350 pounds of metal strip per hour, and 50 pounds of carrier per hour.
- (aa) One (1) SDM EB extrusion line, identified as emission unit X015, constructed in 1989, equipped with one (1) sponge extruder, one (1) dense extruder, one (1) sponge extruder feed hopper, one (1) 1.19 million British thermal units per hour natural gas-fired core metal heater, one (1) carrier dryer, one (1) curing oven, one (1) 1.99 million British thermal units per hour natural gas-fired deodorizing furnace, one (1) bead recovery dryer, and one (1) bead blow off station, with the sponge extruder feed hopper exhausting to a fabric filter identified as CE-04 and exhausting to stack PEF-B5, the core metal heater exhausting to stack PEF-B6, the deodorizing furnace exhausting to stack PEV-B10, the curing oven exhausting to stack PEF-B2, the bead recovery dryer exhausting to stack PEV-B5, and the bead blow off station exhausting to stack PEV-B6, maximum capacity: 400 pounds of rubber per hour, 400 pounds of color ribbon per hour, 350 pounds of metal strip per hour, and 50 pounds of carrier per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Facility Description [326 IAC 2-7-5(15)]: (continued)

- (bb) One (1) SDM EC extrusion line, identified as emission unit X016, constructed in 1994, equipped with one (1) sponge extruder, one (1) dense extruder, one (1) sponge extruder feed hopper, one (1) 1.19 million British thermal units per hour natural gas-fired core metal heater, one (1) carrier dryer, one (1) curing oven, one (1) 1.99 million British thermal units per hour natural gas-fired deodorizing furnace, one (1) bead recovery dryer, and one (1) bead blow off station, with the sponge extruder feed hopper exhausting to a fabric filter identified as CE-04 and exhausting to stack PEF-B5, the core metal heater exhausting to stack PEF-B4, the deodorizing furnace exhausting to stack PEV-B11, the curing oven exhausting to stack PEF-B1, and the bead recovery dryer exhausting and the bead blow off station exhausting to stack PEV-B4, maximum capacity: 400 pounds of rubber per hour, 400 pounds of color ribbon per hour, 350 pounds of metal strip per hour, and 50 pounds of carrier per hour.
- (ee) **One (1) SDM ED extrusion line, identified as emission unit X-033, with a maximum capacity of 1,289 pounds of rubber per hour, equipped with two (2) natural gas-fired microwave curing ovens, each has a heat input capacity of 0.143 million British Thermal Units per hour (mmBtu/hr), exhausting to vents PEV-E1 and PEV-E2; two (2) natural gas-fired hot air rubber curing ovens, each has a heat input capacity of 0.850 mmBtu/hr exhausting to stacks PEF-E1 and PEF-E2; and one wire metal system consisting of two (2) natural gas-fired burners, each has a heat input capacity of 0.375 mmBtu/hr and exhausting to stack PEF-E6.**
- (hh) **One (1) SDM EE extrusion line, identified as emission unit X-035, with a capacity of 1,289 pounds of rubber per hour, including:**
 - (1) **Two (2) natural gas-fired microwave curing ovens, exhausting to vents PEV-E3 and PEV-E4, capacity: 0.143 million British thermal unit per hour, each.**
 - (2) **Two (2) natural gas-fired hot air rubber curing ovens, exhausting to stacks PEF-E7 and PEF-E8, capacity: 0.850 million British thermal unit per hour, each.**
 - (3) **One (1) wire metal system, consisting of two (2) natural gas-fired burners, exhausting to stack PEF-E9, capacity: 0.375 million British thermal unit per hour, each.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X005) shall not exceed 0.882 pound per hour when operating at a process weight rate of 202 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X006) shall not exceed 0.882 pound per hour when operating at a process weight rate of 202 pounds per hour.
- (c) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X007) shall not exceed 0.882 pounds per hour when operating

at a process weight rate of 202 pounds per hour.

- (d) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X008) shall not exceed 0.882 pounds per hour when operating at a process weight rate of 202 pounds per hour.
- (e) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X009) shall not exceed 1.40 pounds per hour when operating at a process weight rate of 402 pounds per hour.
- (f) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X010) shall not exceed 1.40 pounds per hour when operating at a process weight rate of 402 pounds per hour.
- (g) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X011) shall not exceed 1.83 pounds per hour when operating at a process weight rate of 602 pounds per hour.
- (h) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X012) shall not exceed 1.40 pounds per hour when operating at a process weight rate of 402 pounds per hour.
- (i) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the CV extrusion line (X013) shall not exceed 1.40 pounds per hour when operating at a process weight rate of 402 pounds per hour.
- (j) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the SDM EA extrusion line (X014) shall not exceed 2.91 pounds per hour when operating at a process weight rate of 1,200 pounds per hour.
- (k) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the SDM EB extrusion line (X015) shall not exceed 2.91 pounds per hour when operating at a process weight rate of 1,200 pounds per hour.
- (l) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from each facility at the SDM EC extrusion line (X016) shall not exceed 2.91 pounds per hour when operating at a process weight rate of 1,200 pounds per hour.
- (m) Pursuant to 326 IAC 6-3, the PM emissions from the extruder line, X-033 shall be limited to 3.05 pounds per hour at process weight rate of 1,289 pounds per hour (0.64 tons/hour).**

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (ee) — One (1) SDM-ED extrusion line, identified as emission unit X-033, with a maximum capacity of 1,289 pounds of rubber per hour, equipped with two (2) natural gas-fired microwave curing ovens, each has a heat input capacity of 0.143 million British Thermal Units per hour (mmBtu/hr), exhausting to vents PEV-E1 and PEV-E2; two (2) natural gas-fired hot air rubber curing ovens, each has a heat input capacity of 0.850 mmBtu/hr exhausting to stacks PEF-E1 and PEF-E2; and one wire metal system consisting of two (2) natural gas-fired burners, each has a heat input capacity of 0.375 mmBtu/hr and exhausting to stack PEF-E6.
- (ff) — One (1) spray line identified as X-034, equipped with six (6) High Volume Low Pressure (HVLPP) spray guns, using dry filters to control PM overspray emissions, exhausting to stack PEF-E3, and two (2) natural gas-fired coating cure ovens, each has a heat input capacity of 0.340 mmBtu/hr exhausting to stacks PEF-E4 and PEF-E5.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Any change or modification which may increase the VOC potential emissions from spray line, X-034 to 25 tons per year or greater shall be subject to 326 IAC 8-1-6 (General Reduction Requirements) and must be approved by the Office of Air Quality (OAQ) before such change may occur.

D.5.2 Particulate Matter (PM) [326 IAC 6-3-2]

- (1) — Pursuant to 326 IAC 6-3, the PM emissions from the extruder line, X-033 shall be limited to 3.05 pounds per hour at process weight rate of 1,289 pounds per hour (0.64 tons/hour). This limit shall be determined using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \text{ ————— where ————— } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

- (2) — Spray line, X-034 PM overspray emissions shall be limited using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \text{ ————— where ————— } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan in accordance with Section B—Preventive Maintenance Plan of the Part 70 permit, is required for these facilities and the control device.

Nishikawa Standard Company
Topeka, Indiana
Permit Reviewer: CAP/MES

Page 24 of 28
Source Modification: 087-16188-00031
Permit Modification: 087-16667-00031

Compliance Determination Requirements

~~D.5.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]~~

~~The Permittee is not required by this permit to perform compliance tests. However, the Commissioner reserves the right to invoke its authority under 326 IAC 2-1.1-11 to require stack testing, monitoring or reporting at any time to assure compliance with all applicable requirements. If testing is require by IDEM, compliance with Condition D.5.1 and D.5.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing of the Part 70 permit.~~

Compliance Monitoring Requirements ~~[326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]~~

~~D.5.5 Particulate Matter (PM)~~

~~The dry filters shall be in operation at all times Spray Line, X-034 is in operation, in order to comply with the limit in Condition D.5.2.~~

~~D.5.6 Monitoring~~

- ~~(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from Spray Line, X-034 stack PEF-E3 while the spray line is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~
- ~~(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~
- ~~(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.~~

Record Keeping and Reporting Requirements ~~[326 IAC 2-7-5(3)] [326 IAC 2-7-19]~~

~~D.5.7 Record Keeping Requirements~~

- ~~(a) To document compliance with Conditions D.5.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.5.1.~~
 - ~~(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;~~
 - ~~(2) The cleanup solvent usage for each month;~~

- ~~(3) — The total VOC usage for each month; and~~
- ~~(4) — The weight of VOCs emitted for each compliance period.~~
- ~~(b) — To document compliance with Condition D.5.2 the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.~~
- ~~(c) — All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of the Part 70 permit.~~

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
AIR COMPLIANCE BRANCH**

Part 70 Quarterly Report

Source Name: Nishikawa Standard Company
Source Address: 324 Morrow Street, Topeka, Indiana 46571
Mailing Address: 324 Morrow Street, Topeka, Indiana 46571
Part 70 Permit No.: T 087-7182-00031
Facilities: Spray coating line (X025), spray booths (Lines 2, 3, 5 and 6), silicone application lines (X001 and X019), nine (9) CV finishing touchup stations (X003 and X004), urethane application lines (X020, X021, X023), portable spray booth, and three (3) waterborne urethane coating booths (Lines 4 and 7 and Small Robot), **one (1) surface coating line (X-033), and two (2) spray lines (X-034 and X-036)**
Parameter: Total VOC usage
Limit: Less than ~~483~~ **161** tons per consecutive twelve (12) month period

YEAR: _____

Month	VOC Usage (tons)	VOC Usage (tons)	VOC Usage (tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Conclusion

The construction of this modification shall be subject to the conditions of the attached Part 70 Minor Source Modification No. 087-16188-00031, and the operation of this proposed modification shall be subject to the attached Part 70 Significant Permit Modification No. 087-16667-00031.

**Appendix A: Emission Calculations
Process Operations**

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Company Name: Nishikawa Standard Company
Address City IN Zip: 324 Morrow Street, Topeka, Indiana 46571
Source Modification: MSM 087-16188
Permit Modification: SPM 087-16667
Plt ID: 087-00031
Reviewer: CarrieAnn Paukowits
Date: October 2, 2002

	Rubber Throughput (lbs/hr)	VOC Emission Factor (lbs/lb rubber)	VOC (lbs/hr)	VOC (tons/yr)	Total HAPs Emission Factor (lbs/lb rubber)	HAPs (lbs/hr)	HAPs (tons/yr)	PM Emission Factor (lbs/lb rubber)	PM (lbs/hr)	PM (tons/yr)	PM Control Efficiency	PM after controls (lbs/hr)	PM after controls (tons/yr)
Extruding (X-035)	1289	3.95E-05	0.051	0.223	3.95E-05	0.051	0.225	3.67E-08	4.73E-05	2.07E-04	0.00%	4.73E-05	2.07E-04
Hot Air Curing (X-035)	1289	1.90E-03	2.45	10.7	9.76E-04	1.26	5.51	N/A	N/A	N/A	N/A	N/A	N/A
		Totals:	2.50	11.0		1.31	5.74		4.73E-05	2.07E-04		4.73E-05	2.07E-04

Hot Air Curing

HAP	Emission Factor (lb/lb rubber)	Potential Rubber Throughput (lbs/hr)	Potential Emissions (lbs/hr)	Potential Emissions (tons/yr)
1,3 Butadiene	1.24E-06	1289	0.002	0.007
Acetophenone	2.13E-04	1289	0.275	1.203
Aniline	1.48E-07	1289	0.0002	0.001
Benzene	4.88E-05	1289	0.063	0.276
biphenyl	3.92E-07	1289	0.001	0.002
bis (2-ethylhexyl) phthalate	2.74E-07	1289	0.0004	0.002
Carbon Disulfide	6.43E-04	1289	0.829	3.630
Cumene	8.08E-08	1289	0.0001	0.0005
Dibenzofuran	2.10E-06	1289	0.003	0.012
Dimethylphthalate	3.19E-08	1289	0.00004	0.0002
Hexane	3.13E-06	1289	0.004	0.018
Xylenes	5.35E-05	1289	0.069	0.302
Methylene Chloride	3.61E-06	1289	0.005	0.020
Naphthalene	1.07E-06	1289	0.001	0.006
Phenol	3.41E-07	1289	0.0004	0.002
Styrene	4.25E-07	1289	0.001	0.002
Toluene	4.37E-06	1289	0.006	0.025

Emission Factors from Tables 4.12-6, 4.12-8 and 4.12-4 of AP-42 draft Section 4.12
Emission factors are for Rubber Compound #8, EPDM (EPDM Sulfur Cure)

Extruding

HAP	Emission Factor (lb/lb rubber)	Potential Rubber Throughput (lbs/hr)	Potential Emissions (lbs/hr)	Potential Emissions (tons/yr)
1,1,1 Trichloroethane	1.43E-08	1289	1.84E-05	8.07E-05
1,1 - Dichloroethene	5.37E-08	1289	6.92E-05	3.03E-04
1,3 Butadiene	6.04E-08	1289	7.79E-05	3.41E-04
2 Butanone	2.72E-07	1289	3.51E-04	1.54E-03
4Methyl-2-Pentanone	6.80E-08	1289	8.77E-05	3.84E-04
Acetophenone	6.91E-09	1289	8.91E-06	3.90E-05
Acrylonitrile	3.65E-08	1289	4.70E-05	2.06E-04
Aniline	4.13E-09	1289	5.32E-06	2.33E-05
Carbon Disulfide	1.50E-05	1289	1.93E-02	8.47E-02
Carbonyl Sulfide	1.20E-05	1289	1.55E-02	6.77E-02
Chloromethane	2.00E-08	1289	2.58E-05	1.13E-04
Chromium	2.72E-10	1289	3.51E-07	1.54E-06
Cumene	5.17E-08	1289	6.66E-05	2.92E-04
Di-n-butylphthalate	4.00E-09	1289	5.16E-06	2.26E-05
Ethylbenzene	5.93E-08	1289	7.64E-05	3.35E-04
Hexane	6.84E-07	1289	8.82E-04	3.86E-03
Isocetane	1.32E-07	1289	1.70E-04	7.45E-04
Xylenes	3.16E-07	1289	4.07E-04	1.78E-03
Methylene Chloride	2.58E-07	1289	3.33E-04	1.46E-03
Naphthalene	1.46E-08	1289	1.88E-05	8.24E-05
Nickel	2.08E-09	1289	2.68E-06	1.17E-05
Phenol	1.71E-08	1289	2.20E-05	9.65E-05
Styrene	2.21E-08	1289	2.85E-05	1.25E-04
Tetrachloroethene	4.15E-08	1289	5.35E-05	2.34E-04
Toluene	7.05E-07	1289	9.08E-04	3.98E-03

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

Page 2 of 5 TSD App A

**Company Name: Nishikawa Standard Company
Address City IN Zip: 324 Morrow Street, Topeka, Indiana 46571
Source Modification: MSM 087-16188
Permit Modification: SPM 087-16667
Plt ID: 087-00031
Reviewer: CarrieAnn Paukowits
Date: October 2, 2002**

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Material usage per gun (lbs/hr)	Number of guns	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
TW-017B	8.56	78.50%	69.1%	9.4%	71.0%	19.80%	1.32277	6.000	2.77	0.80	0.75	17.91	3.27	1.87	4.06	75%

Potential to Emit

Add worst case coating to all solvents

PM

Control Efficiency

95.00%

Uncontrolled

0.746

17.9

3.27

1.87

Controlled

0.746

17.9

3.27

0.093

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lbs/gal) * Weight % Organics)

Potential VOC Pounds per Hour =Material Usage per gun (lb/hr) * Number of Guns * Weight % VOC

Potential VOC Pounds per Day =Material Usage per gun (lb/hr) * Number of Guns * Weight % VOC * 24

Potential VOC Tons per year =Material Usage per gun (lb/hr) * Number of Guns * Weight % VOC * 8,760 hrs/yr / 2,000 lbs/ton

Particulate Potential Tons per Year = Material Usage per gun (lbs/hr) * Number of guns * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations
HAP Emission Calculations

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Company Name: Nishikawa Standard Company
Address City IN Zip: 324 Morrow Street, Topeka, Indiana 46571
Source Modification: MSM 087-16188
Permit Modification: SPM 087-16667
Plt ID: 087-00031
Reviewer: CarrieAnn Paukowits
Date: October 2, 2002

Material	Density (lbs/gal)	Material usage per gun	Number of guns	Weight % Ethylene Glycol	Ethylene Glycol Emissions (tons/yr)
		(lbs/hr)			
TW-017B	8.56	1.32277	6.000	0.60%	0.209
Total					0.209

METHODOLOGY

HAPS emission rate (tons/yr) = Material usage per gun (lbs/hr) * Number of guns * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100**

Page 4 of 5 TSD App A

**Company Name: Nishikawa Standard Company
Address City IN Zip: 324 Morrow Street, Topeka, Indiana 46571
Source Modification: MSM 087-16188
Permit Modification: SPM 087-16667
Plt ID: 087-00031
Reviewer: CarrieAnn Paukowits
Date: October 2, 2002**

Curing Ovens

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

3.4160

29.92

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.028	0.114	0.009	1.50	0.082	1.26

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 5 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions**

Page 5 of 5 TSD App A

**Company Name: Nishikawa Standard Company
Address City IN Zip: 324 Morrow Street, Topeka, Indiana 46571
Source Modification: MSM 087-16188
Permit Modification: SPM 087-16667
Plt ID: 087-00031
Reviewer: CarrieAnn Paukowits
Date: October 2, 2002**

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	3.14E-05	1.80E-05	1.12E-03	2.69E-02	5.09E-05

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total HAPs
Potential Emission in tons/yr	7.48E-06	1.65E-05	2.09E-05	5.69E-06	3.14E-05	0.028

Methodology is the same as page 4.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.